REMARKS/ARGUMENTS

No claim amendments have been made herein. Claims 1-13 have been previously cancelled. Thus, claims 14-33 are currently pending in this application and are at issue herein.

Allowed Claims

Claims 14-23 have been allowed. Applicant thanks the Examiner for this notification.

§ 102 Claim Rejections

Claims 24-33 stand rejected under § 102(b) as anticipated by U.S. Patent No. 6,862,447 to Solondz ("Solondz"). Applicant respectfully traverses the claim rejections for at least the following reasons.

Burden of Proving Anticipation Under § 102

"[I]n order to demonstrate anticipation, the proponent must show that the four corners of a single, prior art document describe every element of the claimed invention." Net Moneyin, Inc. v. Verisign, Inc., 545 F.3d 1359, 1369, 88 USPQ2d 1751, 1758 (Fed. Cir. 2008). The prior art reference relied upon to show anticipation "must not only disclose all elements of the claim within the four corners of the document, but also disclose those elements arranged as in the claim." Net Moneyin, Inc., 545 F.3d at 1369, 88 USPQ2d at 1758. As arranged in the claim means that "a reference that discloses all of the claimed ingredients, but not in the order claimed, would not anticipate, because the reference would be missing any disclosure of the limitations of the claimed invention arranged as in the claim." Id. "The test is thus more accurately understood to mean arranged or combined in the same way as in the claim." Id.

Claims 24-33

Claims 24-33 are not anticipated by Solondz. The underlying object of the present invention is an automated and cost-effective method and arrangement for detecting a radio coverage of a multicellular mobile radio system. Through such detection, a map of the entire radio coverage area may be created. In accordance with the inventive method and arrangement, all base stations within the radio coverage area remain in the normal operating mode, except one. This one base station is switched to a measuring operating mode to perform measurements on the quality of the RF signals received from each of the base stations locally adjacent to it, as well as to measure a quality of synchronicity between it and each of the locally adjacent base stations. The measurements are taken by the one base station while all of the other base stations, except the one base station switched to the measuring operating mode, remain in the normal operating mode. The results of the measurements are sent to an evaluation unit, which performs evaluations on the measured data and may modify the mobile radio system based on the results of the evaluation.

In accordance with the present invention, all base stations are consecutively switched into the measuring operating mode, one at a time, with the remaining base stations remaining in the normal operating mode. As a result of such consecutive switching, a complete map of the entire radio coverage area can be generated. Also, as a result of the consecutive switching, the availability of the overall system predominantly remains, and the only limitation placed on the system is due to the one switched base station performing the measurements. Additionally, a base station may be able to perform in both the normal operating mode and measuring operating mode in parallel, thus further increasing the availability of the overall system. Based on the

created map of RF coverage by the evaluation unit, the transmit power of one or more base stations may be adjusted to optimize performance.

Independent claim 24 recites, *inter alia*:

> ***a plurality of base stations communicatively connected to the evaluation unit, the plurality of base stations operating in a normal operating mode,***
>
> ***wherein the plurality of base stations are consecutively switched, one at a time, from the normal operating mode to a measuring operating mode,***
>
> ***wherein the one switched base station in the measuring operating mode measures (a) a field strength of each of the base stations locally adjacent to it, with the locally adjacent base stations in the normal operating mode; and (b) a quality of synchronicity between the one switched base station and each of the locally adjacent base stations, with the locally adjacent base stations in the normal operating mode, and***
>
> ***wherein the evaluation unit receives the measured field strength and measure of synchronicity quality for evaluation.***

Thus, as claimed in claim 24, one base station at a time is in the measuring operating mode, and that one base station measures the field strength and quality of synchronization of each of the base stations locally adjacent to it. The locally adjacent base stations remain in the normal operating mode while the one switched base station does the measuring. As set forth in claim 24, each of the plurality of base stations are consecutively switched, one at a time, to the measuring operating mode to perform field strength and quality of synchronization

measurements. In the claimed invention, one base station measures signals (field strength and quality of synchronization) received from a plurality of locally adjacent base stations. Solondz neither discloses nor suggests the above-identified limitations.

Solondz discloses two methods of making measurements in a wireless communication system. In one method, a first base station (referred to in Solondz as the "base station of interest") sends a measurement request to a plurality of other base stations requesting that the plurality of other base stations make operational measurements of the signal transmitted by the first base station which sent the initial measurement request (*i.e.*, the base station of interest). The first base station then transmits a signal at a constant power level that is measured by the plurality of other base stations. (*See* Solondz, col. 3, lns. 22-46; col. 5, lns. 26-42; and col. 7, lns. 1-9). In this one method taught by Solondz, a plurality of base stations are measuring a signal sent by one base station. This is directly the opposite from the present invention, which recites having one base station as the measuring base station, and having that one base station measure signals received from a plurality of base stations locally adjacent to it.

In the other method taught by Solondz, the first base station (referred to in Solondz as the "base station of interest") again sends a measurement request to a plurality of other base stations. But this time the measurement request requests that the other base stations instruct mobile terminals in communication with those other base stations to make operation measurement of the signal transmitted by the first base station which sent the initial measurement request (*i.e.*, the base station of interest). The other base stations each instruct their respective mobile terminals to make operational measures of the signal transmitted by the first base station; and the mobile terminals do so. (*See* Solondz, col. 4, lns. 1-22). The mobile terminals then send their

measurement results back to their respective base stations, along with location of the mobile terminal making the measurement. (*See* Solondz, col. 5, lns. 5-11). The received measurement results and mobile terminal location information are sent by the base stations to a main control unit ("MCU"), which creates a map of the received results for the operational measurements based on the location information associated with each measurement result. (*See* Solondz, col. 5, lns. 11-15).

Alternately, each base station in Solondz may create a map of the received results for the operational measurements based on the location information associated with each measurement result received from its mobile terminals. The base stations then send the created maps to the MCU. (*See* Solondz, col. 5, lns. 16-25). Once again, in this other method taught by Solondz, a plurality of mobile terminals are measuring a signal sent by one base station. This is directly the opposite from the present invention, which recites having one base station as the measuring base station, and having that one base station measure signals received from a plurality of base stations locally adjacent to it.

By only having one base station do the measuring, the present invention has the advantage that it predominantly retains the availability of the overall system and places a small limitation on the system since only one switched base station is performing the measurements.

Furthermore, Solondz includes no disclosure of any consecutive switching of base stations, one at a time, from the normal operating mode to the measuring operating mode. The Office Action cites column 5, lines 26-42 and Fig. 5 of Solondz as allegedly teaching the claimed consecutive switching. However, this recitation of Solondz, which refers to Fig. 6 and not Fig. 5, simply discloses the one method discussed above where the bases stations, and not the mobile

terminals, make the operational measurements of the signal transmitted by the one base station of interest. Solondz is totally devoid of any hint or suggestion of the consecutive switching of base stations to make operational measurements. However, even if there was any switching that occurred in Solondz, the switching would be that of the base station of interest (*i.e.*, the base station whose signal is measured by the other base stations or mobile terminals communicating with the other base stations). This would still not disclose or suggest the claimed invention, since Solondz would still result in one base station sending a signal that is measured by other base stations and/or mobile terminals connection to those other base stations. This is directly the opposite of the claimed invention in which only one base station does the measuring, and the measuring is of the signals received from the other base stations locally adjacent to it which remain in a normal operating mode.

Additionally, the one signal that is measured by the plurality of base stations or mobile terminals in Solondz is a special signal that is at a constant power level and may be sent on a dummy or reserve channel. (*See* Solondz, col. 3, lns. 32-46). Conversely, the plurality of signals from locally adjacent base stations measured by the one base station in the claimed invention are simply normal operating signals since the other locally adjacent base stations remain in the normal operating mode. (*See e.g.*, Published Application, para. [0031], lns. 7-12).

Accordingly, for at least the reasons identified above, independent claim 24 is believed allowable over the prior art.

Claims 25-33 depend cognately from independent claim 24 and add features which further remove the present invention from the prior art. Given at least the distinctions identified

above with respect to independent claim 24, dependent claims 25-33 are believed allowable over the prior art and a separate discussion of them will not be belabored for the sake of brevity.

Conclusion

For at least the above-identified reasons, claims 24-33 are believed allowable over the prior art. Claims 14-23 have been allowed. Allowance of all pending claims 14-33 and passage to issue are respectfully requested. Early notification to that effect is respectfully requested.

It is believed that this Response requires no fee. However, if a fee is required for any reason, the Commissioner is hereby authorized to charge Deposit Account 02-4800 the necessary amount.

Should any issues remain, the Examiner is invited to contact the undersigned at the number listed below to advance prosecution of the case. The Examiner is respectfully requested to direct further communications in this case to the attention of the undersigned at the address below.

Respectfully submitted,

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